# State of California AIR RESOURCES BOARD

#### **EXECUTIVE ORDER G-09-011**

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code, Division 26, Part 5, Chapter 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code section 39515 and 39616 and Executive Order G-02-003;

Relating to Verification under Sections 2780 through 2789 of Title 13 of the California Code of Regulations

Nett Technologies Incorporated
Nett® BlueCAT 200<sup>TM</sup>

The Air Resources Board (ARB) has reviewed Nett Technologies Incorporated request for verification of the Nett® BlueCAT 200<sup>TM</sup>. Based on an evaluation of data provided and pursuant to the terms and conditions specified below, the Executive Officer of the ARB hereby finds that the Nett® BlueCAT 200<sup>TM</sup> reduces emissions of Oxides of Nitrogen + Hydrocarbons to 1.5 g/bhp-hr (2.0 g/kW-hr) consistent with a Level 3a classification (Title 13 California Code of Regulations (CCR) Sections 2782 and Section 2783). Accordingly, the Executive Officer determines that the system merits verification and, subject to the terms and conditions specified below, classifies the Nett® BlueCAT 200<sup>TM</sup> as a Level 3a system. The system may be installed on unregulated engines for model years 1980 to 2001 and non-complying engines for phase-in model years 2001 through 2003.

The aforementioned verification is valid provided the engines meet the following criteria.

- The engine is an off-road spark ignition engine greater than 25 hp.
- The engine is four stroke and naturally aspirated.
- The engine has three or four cylinders with an in-line cylinder configuration.
- The engine is an overhead valve design.
- The engine displacement is greater than 1.4 to 2.5 liters.
- The engine uses (or is converted to use) propane fuel.
- The engine must have an open loop Impco, Nolff, Aisan or Nikki fuel system.
- The engine must not have a pre-existing closed loop 3-way catalyst system.
- The engine has a variable duty cycle.
- The engine should be properly tuned and maintained as specified by the original manufacturer.
- The engine must not have any signs of excessive oil consumption.
- The engine must not leak coolant.
- The Nett<sup>®</sup> BlueCAT 200<sup>™</sup> emission control system must not be used with any engine modified from the originally manufactured system, except if the modification is to the fuel system to make installing the kit possible, i.e. a gasoline fuel system converted to LPG (or the removal and replacement of an LPG system that is not manufactured by Impco, Nolff, Aisan or Nikki).

• The Nett<sup>®</sup> BlueCAT 200<sup>™</sup> emission control system must be installed consistent with specifications listed in the installation/owner's manual shown in the verification application.

IT IS ALSO ORDERED AND RESOLVED: the Nett® BlueCAT 200<sup>TM</sup>, manufactured by Nett Technologies Incorporated of 2-6707 Goreway Drive, Mississauga, Ontario L4V 1P7, Canada is an emission control system. It includes an integrated catalytic converter muffler, normally purchased as a 'direct fit' design, installed in place of the original equipment muffler. The system also includes an electronic control unit and oxygen sensor. The components and catalyst sizing chart for the Nett® BlueCAT 200<sup>TM</sup> system are included in the confidential Attachment 1.

No changes to the design or operating conditions are permitted to the device. The ARB must be notified in writing of any changes to any part of the Nett<sup>®</sup> BlueCAT 200<sup>TM</sup>. Any changes to the device must be evaluated and approved by the ARB. Failure to do so shall invalidate this Executive Order.

Marketing of the Nett<sup>®</sup> BlueCAT 200<sup>TM</sup> using identification other than that shown in this Executive Order or for an application other than that listed in this Executive Order shall be prohibited unless prior approval is obtained from the ARB.

This Executive Order shall not apply to any Nett<sup>®</sup> BlueCAT 200<sup>TM</sup> advertised, offered for sale, sold with, or installed on new off-road equipment prior to or concurrent with transfer to an ultimate purchaser.

As specified in the Verification Procedure (Title 13 CCR Section 2786 (c)), the ARB assigns an Emission Control Group (ECG) name to be included in labels (shown in Attachment 2) that will be permanently affixed to the emission control catalyst and the engine. The assigned ECG name is:

#### CA/2006/NET/LL3a/NH1.5/OFF/SYS01.

Additionally, as stated in the Verification Procedure, Nett Technologies is responsible for honoring a warranty (Section 2787) and conducting in-use compliance testing (Section 2789).

In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and verification provided herein to assure that the verified add-on or modified part continues to meet the standards and procedures of CCR, Title 13, Section 2222, et seq and CCR, Title 13, Sections 2780 through 2789.

Systems verified under this Executive Order shall conform to all applicable California emissions regulations.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order.

This Executive Order supersedes Executive Order G-07-018 issued on June 25th, 2007 and Executive Order G-08-005 issued on June 16, 2008.

Executed at El Monte, California, this 22<sup>nd</sup> day of July, 2009.

Robert H. Cross, Chief Mobile Source Control Division

Confidential Attachment 1:

Confidential Attachment 2:

Attachment 3:

Nett<sup>®</sup> BlueCAT 200<sup>™</sup> Parts List Engine and Catalyst Sizing Table Nett® BlueCAT 200<sup>TM</sup> Labels

### Attachment 3 Executive Order G-09-011

# Nett® BlueCAT 200<sup>TM</sup> Label



Nett Technologies Inc. 2-6707 Goreway Drive, Mississauga, Ontario, Canada L4V 1P7

...the emission control authority

# BLUECAT 200<sup>™</sup> LSI Retrofit Emission Control System Label

The BLUECAT 200<sup>™</sup> LSI retrofit emission control system label is designed according to the Verification procedure, as in Title 13 CCR section 2786(c). Sample Label is shown below.

### Nett Emission Control System

Émissions (Metric): Emissions (Imperial): 2.0 g/kw-hr 1.5 g/bhp-hr Emission Control Group Name: CA/2006/NET/LL3a/NH1,5/OFE/SYS0\* Nett/Technologies Inc. Tel: 800:361-6388 2:6707:Goreway Drive or 905:672-5453 • Mississauga: ON £49 1P7 Made in Canada

Proposed label according to 13 CCR 2786(c)